



DEPARTMENT OF THE AIR FORCE
AIR FORCE INSTALLATION CONTRACTING AGENCY

23 January 2019

MEMORANDUM FOR AF183-005 Phase I Awardees

SUBJECT: AF183-005 Phase II Submission Instructions

1. Thank you very much for your effort in this new 'special topic' phase I format. We have been pleasantly surprised by the results of this experiment thus far. I also want to thank you for your flexibility in continuing to work with us as we refine some of the aspects of the program to make it more clear and effective.
2. The purpose of this memorandum is to release the AF183-005 Phase II submission instructions.
3. If you have any questions, please ask them on the Friday calls.

A handwritten signature in black ink, appearing to read "Jorge L. Manresa", is positioned above the typed name.

JORGE L. MANRESA, Lt Col, USAF
Contracting Officer
338th Specialized Contracting Squadron

Attachment:
AF183-005 Phase II Supplemental Instructions (23 January 2019)

Warfighter Acquisition... Innovation, Excellence, Victory!

Air Force
AF183-005
Phase II Proposal Instructions

These instructions are only to be applied to the AF183-005 ‘special topic’ and are not effective for any other topics or Phases.

All Phase II proposals must be prepared and submitted through the Department of Defense (DOD) Electronic Submission Site: <https://sbir.defensebusiness.org/>

**Deadline for all AF183-005 Phase II Submissions (including Typical and RAPID):
Thursday, 14 February, 2019 at 4:00PM Eastern Time**

*Proposals submitted after 4:00PM ET on the day of the deadline will not be evaluated.
(No exceptions will be made, including IT issues encountered during upload to the electronic submission site.)*

I. NOTIFICATION

Only Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Phase I awardees are eligible to submit SBIR/STTR Phase II proposals. The Phase I firm must qualify as a small business concern as defined in the DoD SBIR Broad Agency Announcement (BAA) at the time of Phase II award. Firms are highly encouraged to revisit the DoD SBIR/STTR Announcements from which their awards resulted to become reacquainted with requirements and elements common to both Phase I and II procurements. NOTE: The Government is not obligated to make any awards under Phase II, nor is it responsible for expenditures by the offeror prior to award of a contract. All awards are subject to availability of funds and successful negotiations.

II. LETTER FROM AIR FORCE MANAGEMENT TEAM FOR THIS TOPIC

Congratulations on being awarded a Phase I contract for the SBIR ‘Open Topic’ proposal. We are eagerly anticipating the results of your product-market fit feasibility studies that are to be completed through Phase I. The end goal of the Phase I effort is to create a well thought-out and detailed plan for a trial proposed solution implementation with an Air Force end-user customer motivated and empowered to help accomplish this trial.

If a truly great product-market fit is successfully accomplished, the most direct path for many companies will be to pursue a sole source SBIR Phase III, contracting directly with the motivated and empowered customer. We strongly recommend this path for most companies with a current non-defense commercial product.

For this SBIR topic, two Phase II options are offered, the typical Phase II (fully funded by SBIR) or RAPID Phase II (wherein the firm secures matching funds). A company may choose to apply to ***either*** the typical SBIR Phase II or the RAPID Phase II. If a company submits applications to both, only the RAPID Phase II application will be evaluated. Phase.

Typical Phase II (\$750,000 SBIR funding, 15 month maximum Period of Performance):

Companies with concepts requiring further ‘incubation’ before pursuing a SBIR Phase III may apply for a typical SBIR Phase II. This would provide additional funds to enable further refinement of the non-defense commercial solution to meet the needs of a specific Air Force end-user customer. These Phase II awards are intended only as a path to full commercialization and should be considered as such. They are not intended to be the final step for any proposed solution. This topic may also make use of the SBIR Phase II Enhancement Program.

‘RAPID’ Phase II (Up to \$1.5M SBIR funding, 27 month maximum Period of

Performance; company must secure matching investor funding): Companies which have gained significant market traction with Government Customers or in the private sector may apply for a ‘RAPID’ Phase II. This process allows companies to apply for larger Phase II funding amounts up to \$1.5M SBIR funding, assuming a third party investment has been secured. The matching amounts for private third party investors to SBIR funding are a minimum of 1:1 (e.g., \$1.5M private + \$1.5M SBIR) or \$0.25 Government funding for every 1 SBIR dollar (e.g., \$375,000 Government+ \$1.5M SBIR). Note the 4:1 Government matching amount is only available to companies with no previous Phase II SBIR awards from DoD or any other Federal agency. If the company has received a prior DoD or other Federal agency Phase II SBIR award, the matching rate for Government dollars is also 1:1. These funds must be received by the company within 45 days of selection for the Phase II. More details can be found in Section III of this document.

III. PROPOSAL SUBMISSION

The Air Force (AF) SBIR/STTR Program Office has instituted training and certification requirements in an effort to combat fraud in the SBIR/STTR program. As a result, each Small Business is required to complete the Fraud, Waste and Abuse Training as part of their Phase II proposal submission. The SBIR/STTR Program training related to Fraud, Waste and Abuse is available at: <https://training.defensebusiness.org/fwa>. When the training has been completed and certified, the DoD Submission Website will indicate this in the proposal, thereby completing the Volume 6 requirement. If the training has not been completed, an error message will be received. The proposal cannot be submitted until this training is complete. Completed proposals must be submitted via the submissions site on or before the date and time specified.

All proposals must be submitted electronically at <https://sbir.defensebusiness.org/>. Only one Phase II proposal file can be uploaded to the DoD Submission Site. The preferred submission format is Portable Document Format (.pdf). Graphics must be distinguishable in black and white.
VIRUS-CHECK ALL SUBMISSIONS.

Phase II proposals require a comprehensive, detailed description of the proposed effort. Typical AF Phase II efforts for this topic are a maximum of 15 months. RAPID Phase II efforts will have a maximum 27 month performance period. The typical Phase II split is 12 months technical performance and three (3) months for final technical report completion. Typical AF Phase II efforts are awarded at an initial value not to exceed \$750,000Phase and \$3,000,000 for a RAPID Phase II. Proposals should demonstrate technical progress or results from the Phase I contract have sufficient promise to solve an important problem to warrant more extensive

research/research and development (R/R&D). Commercial and military potential of the technology under development is extremely important. Proposals emphasizing technologies' dual-use applications and commercial exploitation are sought.

All Phase II R/R&D must be performed by the small business and its team members in the United States, as defined in the DoD Phase I BAA, Section 4.2, "Offeror Eligibility and Performance Requirements", under which the initial effort was awarded. The Phase II principal investigator's primary employment must be with the small business concern at the time of award and during the entire proposed effort. Primary employment is defined as more than one-half of the principal investigator's time spent working for the small business. This precludes full-time employment with another organization.

Knowingly and willfully making false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal Statement Act, 18 U.S.C. Section 1001, punishable by a fine up to \$10,000, up to five years in prison, or both.

The instructions in this document take precedent over any conflicting information in the other SBIR or BAA instructions. However, for any items not mentioned in this document, the information contained in the other SBIR or BAA instructions may still apply. The DoD SBIR 18.3 BAA and AF Instructions may be found at <https://www.acq.osd.mil/osbp/sbir/solicitations/archives.shtml>.

PHASE II "RAPID" Overview

Any time after award of a Phase I SBIR/STTR project, the company and the investor may submit a RAPID application to the DoD Submission Website at www.dodsbir.net/submission. The application must be submitted by the 18.3-005 Phase II RAPID Submission Deadline.

The maximum value of the Phase II RAPID Proposal is \$1,500,000 SBIR funding. The matching funds must be secured from qualified third-party private investors or from non-SBIR Government funds.

Examples include:

- \$1,500,000 SBIR funding, and \$1,500,000 matching private investor funding
- \$375,000 Government funding, and \$1,500,000 SBIR funding

Note the 4:1 Government matching amount is only available to companies never having received a prior Phase II SBIR award from DoD or other Federal agency. If the company has received a prior Phase II SBIR award, the matching rate for Government dollars is also 1:1.

NOTE: Regardless if the funding is secured from Government customers, the Phase II must still be focused on a proposed solution implementation with an AF end-user customer.

Selection and award of a RAPID proposal is not mandated. DoD retains the discretion not to select or fund any RAPID proposals.

The AF will notify each RAPID company whether it has been selected for Phase II award. Once notified, the company and investor must certify within 45 days, all outside investor matching funds have been transferred to the RAPID company.

Every RAPID Phase II proposal shall include all information contained in a typical Phase II proposal, along with a completed RAPID application as described in Section 5.7.8.

Additional RAPID Reporting Requirement: In the company's final Phase II progress report, it must include a brief description (in company format) of how the investor's funds were expended to support the project.

Also, in order to qualify for a RAPID Phase II award, the company MUST:

1. Submit the Phase II proposal before the 18.3-005 Phase II RAPID Submission Deadline;
2. Submit the Phase I final report by the deadline specified in the Phase I contract.
3. Certify within 45 days after Phase II selection notification the entire amount of outside investor matching funds has been transferred to the company.
 - a. For private sector investors, certification consists of a letter, signed by both the company and its outside investor, stating "\$ _____ in cash has been transferred to [company] from [investor] in accordance with the Air Force SBIR/STTR RAPID Phase II procedures." The letter must be sent to the AF Contracting Officer along with a copy of the company's bank statement showing the funds have been deposited. Before signing the certification letter, the company and investor should read the cautionary note at Section 3.8.
 - b. For Government investors, the non-SBIR/non-STTR DoD Program must provide an immediately accessible line of accounting within 45 days.

IMPORTANT: If the AF Contracting Officer does not receive the certification showing the transfer of funds within 45 days, the company will be ineligible for Phase II award under both the RAPID AND typical Phase II solicitations, unless a specific written exception is granted by the AF's SBIR/STTR Program Manager. Failure to meet these conditions in their entirety and within the time frames indicated will generally disqualify a company from SBIR/STTR RAPID participation. Deviations must be approved in writing by the AF Contracting Officer.

III. PHASE II PROPOSAL PREPARATION INSTRUCTIONS

A. Proposal Requirements. A Phase II proposal should provide sufficient information to persuade the AF the proposed work continuation represents an innovative solution to the problem worthy of support under the stated criteria. All sections below count toward the page limitation, unless otherwise specified.

B. Proprietary Information. Information constituting a trade secret, commercial or financial information, confidential personal information, or data affecting national security must be clearly marked. It shall be treated in confidence to the extent permitted by law. Be advised, in the event of proposal selection it is likely the Work Plan will be incorporated into the resulting contract, in whole or part, by reference or as an attachment. Therefore, segregate any information to be excluded from public release pursuant to the Freedom of Information Act (FOIA). See Section 3.9 of the DoD Announcement regarding the definition of Proprietary Information and Section

5.3 of the DoD Announcement regarding the marking of Proprietary Information.

C. General Content. Proposals should be direct, concise, and informative. Type shall be no smaller than 12- pitch or 11-point on standard 8 1/2” X 11” paper, with one-inch margins and pages consecutively numbered. Offerors are discouraged from including promotional and non-programmatic items, except when directed, e.g., in the ‘1-pager’ and the ‘100-second video’. The proposal will constitute six volumes:

Volume 1: DoD Coversheet

Volume 2: Technical Volume

Volume 3: Cost Volume

Volume 4: Company Commercialization Report (CCR)

Volume 5: Supporting Documents

Volume 6: Fraud, Waste, and Abuse

1. VOLUME 1: DOD COVERSHEET

On the DoD Submission Web site, <https://sbir.defensebusiness.org/>, prepare the Proposal Cover Sheet. The Cover Sheet must include a brief technical abstract of no more than 200 words describing the proposed R&D project, including discussion of anticipated benefits and potential commercial applications. **Do not include proprietary or classified information in the Proposal Cover Sheet.** If the proposal is selected for award, the technical abstract and discussion of anticipated benefits may be publicly released. Once the Cover Sheet is saved, the system will assign a proposal number. The cover sheet may be modified as often as necessary until the solicitation period closes.

1.1 Technical Abstract

The technical abstract should also include a brief description of the program objective(s) and a description of the effort. The technical abstract for each successful proposal will be submitted to the Office of the Secretary of Defense (OSD) for publication. Therefore, it must not contain proprietary or classified information. The term “Component” on the coversheet refers to the Air Force organization requesting the Phase II proposal.

1.2 Anticipated Benefits/Potential Commercial Applications of the Research or Development

The first line of the ‘Anticipated Benefits’ section should follow the following format: *We solved [AF problem] by providing [advantage], to help [AF End-user] accomplish [AF End-User’s goal]. We will recognize profit by charging [non-defense commercial customers] to get [non-defense commercial benefit].*

Be very explicit regarding the proposed AF end user, the proposed AF customer (if different, which is likely), and where non-SBIR funding will be sought after successful Phase II completion. This list should also include non-proprietary, non-defense commercial customers. For this section, do not include specific AF names or non-defense customers, as this section will be publically released.

1.3 List of maximum 8 Key Words or phrases, separated by commas, describing the Project
This section will be used to categorize the application. These keywords may also be used to assist in finding additional Phase III transition partners within the Government. Therefore, consider key-words to be more than technical key-words. A potentially useful analogy to this section are Search Engine Optimization (SEO) Keywords.

1.4 Prior, Current, or Pending Support of Similar Proposals or Awards

WARNING: While permissible, with proper notification, to submit identical proposals or proposals containing a significant amount of essentially equivalent work under more than one Federal announcement, it is unlawful to enter into contracts requiring essentially equivalent effort. Any potential for this situation must be disclosed to the announcement agency (ies) before award. If a proposal submitted in response to this announcement is substantially the same as another previously, currently, or in process of being funded by another Federal agency/AF or the same AF, the company must so indicate on the coversheet by answering ‘Yes’ to the following (or similar) question on “Has a proposal for essentially equivalent work been submitted to other US government agencies or AFs?”

2. VOLUME 2: TECHNICAL VOLUME

The technical volume should be no longer than 15 pages. Pages beyond 15 will not be reviewed. Include page numbers in the technical volume.

2.1 Table of Contents: A table of contents should be located immediately after the cover sheet.

2.2 Glossary: Include a glossary of acronyms and abbreviations used in the proposal.

2.3 Technical Summary:

2.3.1 Identification and Significance of the Problem or Opportunity: Briefly describe the specific problem/opportunity addressed in Phase I and its relationship to Phase II.

2.3.1.1 Non-Defense Commercial Solution: Describe the non-defense commercial solution, including its use by non-defense commercial customers. Describe its technical specifications as well as the qualitative and quantitative value it brings to solution users. Additionally, please answer the following questions:

- Is the proposed item “of a type” (similar to a commercial item) customarily used by the general public or by nongovernmental entities for nongovernmental purposes?
- Has proposed item been (i) sold, leased, or licensed to the general public; OR (ii) offered for sale, lease, or license to the general public?

2.3.1.2 Proposed Adaptation of Non-Defense Commercial Solution: Describe the proposed adaptations of the non-defense commercial solution to meet a US

Government end-user need. In this section, please answer the following questions:

- How similar is the modified item to other modified items sold in the commercial marketplace to non-US Government customers?
- Does the supplier perform similar modifications for non-US Government customers?
- Do the DoD unique modifications change the essential use and purpose of the product?
- Are there differences in the production/manufacturing/delivery processes used to perform the modification for Federal Government versus non-Government customers?

2.3.2 Phase I ‘Feasibility Study’ Results:

2.3.2.1 Breadth of Air Force/US Government End-User/Customer Exploration: Include specific numbers on outreach such as the number of:

- Total Federal Government contact attempts
- Total Federal Government contacts reached
- Successful contacts over e-mail
- Successful contacts over phone
- Successful contacts in person
- Unique Federal Government organizations contacted
- Unique Federal Government organizations reached
- Unique USAF organizations contacted
- Unique Federal Government organizations reached

2.3.2.2 AF Customer Exploration Methods: Describe the methods (both successful and unsuccessful) used to perform the feasibility analysis/AF Customer Exploration for adapting the non-defense commercial solution to a specific AF end-user’s needs.

2.3.2.3 Empowered and Committed AF End-Users: List and describe any specific Air Force End-Users willing to trial the proposed solution in a Phase II, e.g., through a Memorandum of Understanding. Specifically explain how the proposed solution meets the need(s).

2.3.2.4 Empowered and Committed US Government (non-AF) End-Users: List any firm commitments, e.g., through a MOU, received from additional US Government End-Users directly related to the proposed solution. MOUs, if any, must be uploaded to the ‘Letters of Support’ section of Volume 5, Supporting Documents.

2.3.3 Phase II Technical Objectives and Key Results: Describe clearly three to five Phase II trial objectives. These objectives should be tied to specific tasks to be accomplished in a Phase II trial. These objectives should be qualitative, but specific to

the participating AF end-users. The objectives should be tied to specific time periods and be tangible and unambiguous about anticipated results. These objectives should describe end-state outcomes (what will be done) rather than processes or activities (how it will be done). Each objective should be accompanied by three to five specific ‘key results’ measurable throughout Phase II performance. Many of these key-results will be quantitative in nature, e.g. deliver X widgets to AF end user; non-quantitative key results should be clearly measurable.

2.3.3.1 Required Stakeholders Needed to Accomplish Phase II: List anticipated Interactions with stakeholders necessary to accomplish a Phase II trial. Such Stakeholders may include lawyers, test range officials, information assurance Officials, system program office engineers, etc. Clearly describe requirements to Complete the Phase II trial not within the Phase II offeror’s immediate control and plans to work within those constraints.

2.4 Phase II Work Plan: For this Phase II topic, a Work Plan, **not** a Statement of Work, is required. The intent is to ultimately award a contract for *what* is to be done, rather than *how* the work is to be done. In line with this intent, the Work Plan should be structured to center around the purpose of the work to be performed, with the effort’s requirements set forth in clear, specific, and objective terms with measurable outcomes. The work plan has two mandatory features: (1) Work stated in terms of outcomes or results, rather than methods of performance; and (2) measurable performance standards, including assessment methods against these standards. The plan should include the planned location for and mechanics of accomplishing the proposed approach. Phase II efforts attempt to demonstrate the Phase I effort’s technical feasibility, including transition of results to the private sector or Government customer.

2.4.1 Scope: List the major requirements and specifications of the effort.

2.4.2 Task Outline: Provide an outline of work to be accomplished throughout the effort.

2.4.3 Milestone Schedule: The maximum period of performance for a Phase II contract under this topic will be 15 months. Include a concise program schedule with all key milestones identified. Propose a suggested start date, usually ~2 months after Phase II submission deadline. With each milestone, include:

- An expected delivery date, represented by the number of months after contract award, e.g., widget delivered at contract award (CA) + 6 months.
- A specific deliverable of value to be provided to the AF end-user.
- Clear acceptance criteria for all parties to determine milestone achievement.
- A suggested payment amount and a reference to the rationale or supporting information.

Rationale or supporting information should be uploaded to the ‘Additional Cost Information’ section in Volume 5: Supporting Information.

NOTE: If proposing to work with more than one AF end-user, all MOUs must be consolidated by the offeror into a single, coherent Schedule of Milestones.

Below is a **notional** chart to use as an informational reference for constructing the Schedule of Milestones.

The following chart will detail the list of milestones. Each milestone will mark the completion of a measurable event, e.g., baseline execution plan, development of a prototype component, a test plan, prototype production, final report submission, etc). Status reports cannot be milestones. Descriptions will describe how the milestone will be demonstrably completed. Payments associated with each milestone must reflect justifiable costs to achieve milestone completion. The evidence to justify these costs, e.g., invoices from non-defense commercial customers, should be included in Volume 5: Supporting Documents. Please note, pricing information from non-defense commercial customers is likely proprietary and should be marked as such. See Section 3.9 of the DoD BAA for the definition of Proprietary Information and Section 5.3 regarding Proprietary Information marking.

<u>TASK/MILESTONE</u>	<u>EXPECTED DELIVERY (MONTH AFTER CONTRACT AWARD)</u>	<u>DELIVERABLE</u>	<u>ACCEPTANCE CRITERIA</u>	<u>PAYMENT AMOUNT (ONLY IF APPLYING TO RAPID)</u>
EXAMPLE: 01 - Finalize customer requirements for adaptation	Award +1 month	Complete set of specifications for adapted commercial solution as well as quantitative goals for the test of the widgets in the AF operational environment.	AF end-users and AF customers agree that the specifications will meet their needs.	\$50,000 (EVIDENCE: invoice from pilot program with non-defense customer A.)
EXAMPLE: 02 - Deliver 3 adapted commercial widgets	Award + 4 months	Three adapted widgets will be delivered to the AF end-user meeting specifications described in task 01.	The AF end-user will physically accept the adapted widgets	\$250,000 (EVIDENCE: 2018 sales of non-defense commercial widget)
EXAMPLE: 03 - Training for using widgets	Award + 4 months	The solution provider will train 3 AF end-users to use the adapted solution in their operational environment.	The 3 AF end-users verify training is sufficient to use the adapted widget.	\$75,000 (EVIDENCE: invoice from pilot program with non-defense customer A)
EXAMPLE: 04 - Test support for widgets	Award + 12 months	The solution provider will support the test, producing a report regarding success of adapted widget ¹ performance to solve the AF users' needs as described in task 01.	The test report will be endorsed by the AF end-users, confirming test results.	\$100,000 (EVIDENCE: invoice from pilot program with non-defense customer B)

EXAMPLE: 05 - Warranty for widgets	Award +15 months	The adapted widgets shall remain in a workable condition throughout the contract	The AF end-users verify widgets worked during entire contract's performance.	\$100,000 (EVIDENCE: invoice from pilot program with non-defense customer C)
------------------------------------	------------------	--	--	--

2.4.4 Deliverables: Include a section clearly describing the specific sample/prototype hardware/software to be delivered, as well as data deliverables, schedules, and quantities. Be aware of the possible requirement for unique item identification IAW DFARS 252.211-7003, Item Identification and Valuation. For hardware, more information may be found at <https://www.acq.osd.mil/dpap/dars/dfars/html/current/252211.htm#252.211-7003>.

2.4.5 Required Reports: At a minimum, the following reports will be required deliverables for ALL Phase II contracts and must be included in the work plan. All are considered to be scientific and technical reports.

NOTE ON SBIR DATA RIGHTS: The Government obtains SBIR data rights in technical data and computer software generated under SBIR/STTR contracts and marked with the SBIR data rights legend. These rights provide the Government limited rights in technical data and restricted rights in computer software during the SBIR data protection period commencing with contract award and ending five (5) years after submission of the last contract deliverable under the effort which generated the data. Upon expiration of the five year restrictive license, the Government has unlimited rights to the SBIR data, unless the firm receives another contract under which the SBIR data rights may be asserted. During the SBIR data protection period, the Government may not release or disclose SBIR technical data or computer software to any person except as authorized under limited rights in technical data or restricted rights for computer software.

2.4.5.1 Final Report: The draft is due 30 days after completion of the Phase II technical effort. The first page of the final report will be a single-page project summary, identifying the purpose of the work, providing a brief description of the effort accomplished, and listing potential applications of the results. The summary may be published by DoD. Therefore, it must not contain any proprietary or classified information. The remainder of the report should contain details of the project objectives met, work completed, results obtained, and estimates of technical feasibility.

2.4.5.2 Status Reports: Status reports are due quarterly at a minimum. These should be concise documents describing progress in terms of meeting the needs of the selected AF end-user. Each status report should not be longer than 15-slides. The status reports should include updates on progress toward Phase II objectives and key results, and should include a quantitative measure between 0 and 1 of progress towards each objective and key result. ONLY FIRM FIXED PRICE PHASE II CONTRACTS WILL BE AWARDED UNDER THIS

SOLICITATION.

2.4.5.3 Phase II Summary Report: The Phase II summary report is due at the end of the technical effort and must be submitted via email to the cognizant AF Contracting Officer. Each report should not exceed 700 words and should include a description of the technology and anticipated applications/benefits for Government and/or private sector use.

2.4.5.4 Additional Reporting: The AF end-user or customer may require additional reporting or documentation including:

- i. Software documentation and users' manuals;
- ii. Engineering drawings;
- iii. Operation and maintenance documentation;
- iv. Safety hazard analysis when the project will result in partial or total development and delivery of hardware; and
- v. Updates to the commercialization results.

2.4.5.5 [Only If Applying to RAPID] Additional RAPID Reporting Requirement: In the company's final Phase II status report, it must include a brief accounting in the company's format regarding investor funds' expenditures in support of the project.

2.4.6 Safety Related Deliverables: Safety requirements are to be followed in the design and performance of the proposed project. The Work Plan must contain separate sections or paragraphs specifically addressing the following:

2.4.6.1 [Hardware Only] Preliminary Hazard Analysis (Report): If hardware is to be developed, the contract will require at least a preliminary hazard analysis. This should be included in the deliverables.

2.4.6.2 [If using Hazardous Materials] Hazardous Material Report: If the proposed effort involves the use of potentially hazardous materials with potential risk to personnel or property, the following are required:

- i. Identification of material;
- ii. Purpose of the specific material; and
- iii. Possible alternatives/procedures/safeguards to minimize risk.

2.5 Commercialization Potential

2.5.1 Commercialization Plan: The DoD requires a commercialization plan be submitted with the Phase II proposal. The commercialization plan should briefly describe the commercialization potential for the anticipated results of the proposed project, as well as plans to exploit it in both the defense and non-defense markets. Specifically address the following questions:

- i. What is the first planned product to incorporate the proposed technology?
- ii. Who are the probable customers, and what is the estimated market size?
- iii. How much money is needed to bring this technology to market and how will it be raised?
- iv. Does the firm have the necessary marketing expertise and, if not, how will the firm compensate?
- v. Who are the probable competitors, and what price/quality advantage is anticipated by the firm?
- vi. Are there private sector or non-SBIR/STTR funding sources demonstrating commitment to Phase II efforts/results? This includes outside private investment such as Venture Capital. Please delineate between past investments and potential future investments, e.g., currently raising a round, have signed term sheets. Also note if any of those commitments are conditional on receiving a Phase II award.
- vii. Please note any private investment funds from qualified third-party investors may be available for potential Phase II enhancements, e.g., matching funds where the investor provides \$500,000 and the SBIR Program provides \$500,000 for a Phase II enhancement. More information on qualified third-party investors may be found at <https://www.acq.osd.mil/osbp/sbir/sb/investment-qualification.shtml>.
- viii. Are there any Phase III (Government or commercial) follow-on commitments for the research subject?
- ix. What is the total revenue in the last 12 months from sales of the non-defense commercial solution proposed to be adapted to meet AF needs?
- x. State the anticipated end results of the proposed Phase II, specifically addressing plans for transfer into Phase III with a potential Government customer.
- xi. Discuss the significance of the Phase II effort in providing a basis for the Phase III effort.

NOTE: If awarded a Phase II contract, the contractor is required to periodically update the commercialization results of the Phase II project at <https://sbir.defensebusiness.org/>. These updates will be required one (1) year after the start of Phase II, at completion of Phase II, and after the contractor submits a new SBIR/STTR proposal to DoD. Firms not submitting a new proposal to DoD will be requested to provide updates annually after Phase II completion.

2.5.2 Military Applications/DoD Customers: Briefly describe the existing/potential military requirement and the military potential of the proposed solution. Identify the DoD agency/organization most likely to become the customer for the solution. In many cases the potential DoD customer will be different than the end user, such as a user in an operational unit and a customer in a System Program Office. State if any DoD agency has expressed interest in, or commitment to, a non-SBIR, Federally-funded Phase III effort or a Phase II Enhancement with matching SBIR funds. If so, please include any relevant details regarding funding availability, i.e., fiscal year, for transitioning the solution, and any other relevant funding details, e.g., type of funding –RDT&E, Operations and Maintenance, etc. Include agency point of contact names, e-mail addresses, and telephone numbers.

NOTE: 'Types of funding' Reference:

<https://www.dau.mil/acquipedia/Pages/ArticleDetails.aspx?aid=9f96cbe4-ed8f-4d20-94c9-b89130c0eb70>

2.5.3 Non-Defense Commercial Customers

2.5.3.1 Past revenue from non-defense commercial customers of the proposed non-defense commercial solution: Clearly list non-defense commercial customers, along with the amount of revenue received from them as a result of sales of the proposed solution. This would not include other solutions the company may offer, but the specific non-defense commercial solution proposed for adaption in this Phase II application.

2.5.3.2 Potential upcoming revenue-generating projects directly related to the proposed non-defense commercial solution or adaptation there-of. Also separately list potential upcoming revenue-generating projects with any defense or non-defense customers directly related to the proposed solutions. Keep in mind ongoing or completed projects/sales, such as those in section 2.5.1, are strongly preferred to potential, upcoming projects.

2.6 Key Personnel: Identify all key personnel involved in the project, including subcontractors and consultants. Include information directly related to education, experience, and citizenship. A technical resume for the Principal Investigator, including publications, if any, must also be included.

2.6.1 Non-U.S. Citizens: Identify all non-U.S. citizens expected to be involved in the project as direct employees, subcontractors, or consultants. For these individuals, in addition to technical resumes, please provide countries of origin, type of visas or work permits under which they are performing, and explanation of their anticipated level of involvement in the project. When the topic area is subject to export control, these individuals, if permitted to participate, are limited to work in the public domain. Further, tasks assigned must not be capable of assimilation into an understanding of the project's overall objectives. This prevents foreign citizens from acting in key positions, such as Principal Investigator, Senior Engineer, etc. Additional information may be requested during negotiations in order to verify foreign citizens' eligibility to perform on a contract awarded under this announcement.

2.6.2 Investors and Partners: Identify all investors, shareholders or strategic advisors in the company making significant contributions to support the Phase II effort. Explain how their past experiences or track record as a firm or an individual can help with the technical or commercialization efforts. Examples of this may include the ability to leverage other companies in the portfolios of the company's investors or access to other sources of capital.

2.6.3 Related Work: Describe significant activities directly related to the proposed effort, including any previous programs conducted by the Principal Investigator, proposing firm, consultants, or others, and their application to the proposed project. Also list any reviewers providing comments regarding the offeror's knowledge of the state-of-the-art in the specific approach proposed. Specifically include any other Government contracts, SBIR or otherwise, awarded, previously proposed, or intend for proposal related to this work.

3. VOLUME 3: COST VOLUME

The maximum cost of a Phase II contract under this topic will be \$750,000 for a typical SBIR Phase II or \$1,500,000 for a RAPID Phase II. **ONLY FIRM FIXED PRICE (FFP) PROPOSALS will be accepted for Phase II awards under this topic.** Proposers should note FFP payments shall be tied to measurable milestones, as agreed to with the Government. Complete the Cost Volume in the format shown in the Cost Breakdown Guidance by using the on-line cost volume form on the DoD Submission Web site. Some items in the Cost Breakdown Guidance may not apply to the proposed project. If that is the case, there is no need to provide information on each and every item. What matters is enough information be provided for the Government to understand how requested funds will be used if a contract is awarded.

Price analysis, including reasonableness, realism, and completeness, of the proposed costs is required. If based on comparison with prior efforts, identify the basis upon which the prior prices were determined to be reasonable. If price analysis techniques are inadequate, provide a cost analysis IAW [FAR 15.404-1\(c\)](#). Cost analysis includes, but is not limited to, consideration of materials, labor, travel, other direct costs, and proposed profit rates.

For known costs such as the price of the non-defense, commercial solution, it may be possible to include these costs as 'Direct Costs' in the on-line Cost Volume. If these are included as direct costs, be sure to include substantiating evidence the price and costs are reasonable and realistic, e.g., invoices to non-defense commercial customers. This same logic may apply to adaptations of the non-defense commercial solution, warranties, training, and reporting, or to other cases for substantiating evidence price is reasonable and costs are realistic, e.g., invoices to non-defense commercial customers for adaptations of the commercial solution, warranties, or training). Any costs without justification, e.g., in the form of invoices from the commercial market, should be detailed through the cost estimating processes. All substantiating evidence should be included in the 'Additional Cost Information' in the Supporting Documents Volume (Volume 5).

When a proposal is selected for award, be prepared to submit further documentation to the AF Contracting Officer to substantiate costs, e.g., an explanation of cost estimates for equipment, materials, and consultants or subcontractors. For more information about cost proposals and accounting standards, see the DCAA publication titled "Audit Process Overview – Information for Contractors" available at <http://www.dcaa.mil>.

Information that may be included in the on-line Cost Volume form includes (but is not limited to):

1. List all key personnel by name as well as by number of hours dedicated to the project as direct labor.
2. Costs of special tooling and test equipment and material cost may be included under Phase II. Inclusion of equipment and material will be carefully reviewed relative to need and appropriateness for the work proposed. The purchase of special tooling and test equipment must, in the opinion of the AF Contracting Officer, be advantageous to the Government and should be related directly to the specific topic. These may include such items as innovative instrumentation or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will be vested with the AF, unless it is determined transfer of title to the contractor would be more cost effective than Government recovery of the equipment.
3. Cost for travel must be justified and related to the needs of the project.
4. Cost sharing is permitted for proposals under this solicitation. However, cost sharing is not required nor will it be an evaluation factor in consideration of Phase II proposal.
4. All subcontractor costs and consultant costs must be detailed at the same level as prime contractor costs in regard to labor, travel, equipment, etc. Provide detailed substantiation of subcontractor costs in the cost proposal. Enter this information in the Explanatory Material section of the on-line cost proposal form and include in the 'Additional Cost Information' in the Supporting Documents Volume (Volume 5).
5. VOLUME 4: COMPANY COMMERCIALIZATION REPORT (CCR)

The small business's record of commercializing SBIR/STTR or other shall be reflected in its Company Commercialization Report. The Company Commercialization Report of prior SBIR/STTR awards may be included to satisfy this requirement.

The Company Commercialization Report is the fourth section of a complete proposal package. The Company Commercialization Report is prepared through the DoD Submission Web site (<https://sbir.defensebusiness.org/>). A Company Commercialization Report is required even if the proposing firm has not previously received SBIR or STTR awards. Follow the instructions on the SBIR/STTR Submission Web site and enter the quantitative commercialization results of the firm's prior Phase II projects. Include the items listed below as well as other information relative to the firm's commercialization track record.

1. Sales revenue from new products and non-R&D services resulting from Phase II technology;
2. Additional investment from sources other than the Federal SBIR/STTR Program in activities furthering the development and/or commercialization of Phase II technology;
3. Whether the Phase II technology has been used in a fielded DoD system or acquisition program and, if so, which system or program;

4. The number of patents resulting from the contractor's participation in the SBIR/STTR Program;
5. Growth in number of firm employees; and
6. Whether the firm has completed an initial public offering of stock (IPO) resulting, in part, from a Phase II project.

All prior DoD and non-DoD Phase II projects must be reported, regardless of whether the project has any commercialization to date. The Web site will compare these results to the historical averages for the DoD SBIR Program to calculate a Commercialization Achievement Index (CAI) value. Only firms with four or more Phase II projects awarded at least two years prior to this solicitation will receive a CAI score. Otherwise the CAI is not applicable; see the Company Commercialization Report section of the DoD Submission Web site for more details. Firms with a CAI at the 20th percentile or below will be rated no higher than “Marginal” for this factor. This report shall only be prepared once and submitted with all proposals for this solicitation. A report showing a firm has received no prior Phase II awards will not affect the firm's ability to obtain a SBIR award.

Additional explanatory material relating to the firm's record of commercializing its prior SBIR or STTR projects may be included in the Commercialization Track Record Narrative section of the Company Commercialization Report. Examples of the additional information include: commercialization successes in Government or private sector markets not fully captured in the quantitative results, e.g., commercialization resulting from a firm's prior Phase I projects; mitigating factors accounting for low commercialization; recent changes in the firm's organization or personnel designed to increase the firm's commercialization success; and new investments from qualified third party investors.

6. VOLUME 5: SUPPORTING DOCUMENTS

The Supporting Documents Volume is NOT optional for this topic and is provided for small businesses to submit additional documentation to support the Technical Volume (Volume 2) which is limited to 15 pages, and the Cost Volume (Volume 3).

Documents acceptable for inclusion in Volume 5 are:

1. Letters of Support
2. Additional Cost Information
3. Funding Agreement Certification
4. Technical Data Rights (Assertions)
5. Lifecycle Certification
6. Allocation of Rights
7. Other

6.1 Letters of Support: Letters of support are intended to help convince reviewers the proposed innovation, if developed, would solve a real market need. More generally, letters of support help validate claims made in the proposal about commercial impacts. Therefore, letters from potential end users of the technology (customers) and corporate partners/collaborators are appropriate. Letters from actual or potential investors can also help. Include in this section MOUs from AF end-users or customers or from non-AF US Government end-users or customers. All letters should be combined into a single PDF file before being uploaded, and the letters should be

organized logically, e.g., all AF MOUs in one section, non-AF US Government MOUs in another, followed by letters from non-defense commercial customers, etc.

6.2 Additional Cost Information: A detailed cost proposal must be submitted and uploaded as ‘Additional Cost Information’ in Volume 5. Cost proposal information will be treated as proprietary. The detailed cost information to support the inputs in the Cost Volume (Volume 4) should be included in this section. This includes all information substantiating direct costs based upon price analysis, e.g., invoices from similar sales to non-defense commercial customers to justify prices.

Price analysis, including reasonableness, realism, and completeness, of the proposed costs is required. If based on comparison with prior efforts, identify the basis upon which the prior prices were determined to be reasonable. If price analysis techniques are inadequate, provide a cost analysis IAW FAR 15.404-1(c). Cost analysis includes, but is not limited to, consideration of materials, labor, travel, other direct costs, and proposed profit rates.

Proposed costs must be provided by both individual cost element and contractor fiscal year (FY) in sufficient detail to determine the basis for estimates, as well as the purpose, necessity, and reasonableness of each. This information will expedite award of the resulting contract if the proposal is selected for award.

NOTE: ONLY FIRM FIXED PRICE PROPOSALS WILL BE ACCEPTED UNDER THIS TOPIC.

5.2.1 Cost Proposal: The cost proposal includes:

- a. Direct Labor – Identify key personnel by labor category, number of hours, actual hourly rates, labor overhead, and/or fringe benefits per contractor FY.
- b. Direct Materials – Costs for materials, parts, and supplies must be justified and supported. Provide an itemized list of types, quantities, prices, and, where appropriate, purpose. If computer or software purchases are planned, detailed information such as manufacturer, price quotes, proposed use, and support for the need will be required.
- c. Other Direct Costs – This includes specialized services such as machining or milling, special test/analysis, and costs for temporary use/lease of specialized facilities/ equipment. Provide usage (hours) expected, rates, and sources, as well as brief discussion concerning the purpose and justification. Proposals including leased hardware must include an adequate lease versus purchase rationale.

Special tooling/test equipment/material costs are acceptable but will be carefully reviewed to determine the need/appropriateness to the work proposed. The Contracting Officer must decide whether these purchases are advantageous to the Government and are directly related to the proposed effort. Title to property furnished by the Government will be vested with the AF unless determined to be

more cost-effective for transfer to the contractor. The Government's intention is not to directly fund purchase of general purpose equipment.

d. Subcontracts – Subcontract costs must be supported with copies of the subcontract agreements. Agreement documents must adequately describe the work to be performed and basis for cost. The agreement document should include a SOW or Work Plan, assigned personnel, hours and rates, materials (if any), and proposed travel (if any). A letter from the subcontractor agreeing to perform a task or tasks at a fixed price is not considered sufficient. The proposed total of all consultant fees, facility leases or usage fees, and other subcontract or purchase agreements may not exceed one-half of the total proposed price or cost, unless otherwise approved in writing by the Contracting Officer.

IAW FAR 15.404-1, price analysis, including reasonableness, realism, and completeness, of the proposed subcontractor costs by the prime is required. If based on comparison with prior efforts, identify the basis upon which the prior prices were determined to be reasonable.

NOTE: Prices for all sub-contractors must be justified as reasonable, realistic and complete. If price analysis techniques are inadequate or the FAR requires submission of subcontractor cost or pricing data, provide a cost analysis IAW FAR 15.404-1(c). Cost analysis includes, but is not limited to, consideration of materials, labor, travel, other direct costs, and proposed profit rates.

e. Consultants – For each consultant, provide a separate agreement letter briefly stating the service to be provided, hours required, and hourly rate and include a short, concise resume.

f. Travel – Travel costs must be justified as related to the needs of the effort. Include destinations, the number of trips, number of travelers per trip, airfare, per diem, lodging, ground transportation, etc. Information regarding per diem and lodging rates may be found in the Joint Travel Regulation (JTR), Volume 2, www.defensetravel.dod.mil.

g. Indirect Costs – Indicate the basis of the proposed rates, e.g., budgeted/actual rates per FY, etc. The proposal should identify the specific rates used and allocation bases to which they are applied. Do not propose composite rates; proposed rates and applications per FY throughout the anticipated performance period should be provided.

h. DD Form 2345 – For proposals submitted under export-controlled topics (either International Traffic in Arms (ITAR) and Export Administration Regulations (EAR)), a copy of the certified DD Form 2345, Militarily Critical Technical Data Agreement, or evidence of application submission must be included. The form, instructions, and FAQs may be found at the United States/Canada Joint Certification Program website,

<http://www.dla.mil/HQ/InformationOperations/Offers/Products/LogisticsApplications/JCP/DD2345Instructions.aspx>. NOTE: This topic is not subject to export-control.

i. Approval of the DD Form 2345 will be verified if proposal is chosen for award.

NOTE: This topic is not subject to export-control considerations. Therefore, a DD Form 2345 is not required.

5.3 Funding Agreement Certification: Small businesses selected for award must complete this certificate at the time of award. All questions must be answered and an authorized officer of the company must sign and date this certificate. This need not be completed before submitting a proposal, but must be signed at or before contract award.

5.4 Technical Data Rights (Assertions): Rights in technical data, including software, developed under the terms of any contract resulting from proposals submitted in response to this solicitation generally remain with the contractor, except that the Government obtains a royalty-free license to use such technical data only for Government purposes during the period commencing with contract award and ending five years after completion of the project under which the data were generated. This data should be marked with the restrictive legend specified in DFARS 252.227-7018. Upon expiration of the five-year restrictive license, the Government has unlimited rights in the SBIR data. During the license period, the Government may not release or disclose SBIR data to any person other than its support services contractors except: (1) For evaluation purposes; (2) As expressly permitted by the contractor; or (3) A use, release, or disclosure that is necessary for emergency repair or overhaul of items operated by the Government. See [DFARS clause 252.227-7018](#), "Rights in Noncommercial Technical Data and Computer Software – Small Business Innovation Research (SBIR) Program."

If a proposer plans to submit assertions in accordance with DFARS 252.227-7017, those assertions must be identified. Further, assertion of use, release, or disclosure restriction MUST be included with the proposal submission and submitted in this section. The contract cannot be awarded until assertions have been approved.

5.5 Lifecycle Certification: All SBIR/STTR Phase I and II awardees must complete this certification document at the following times: Phase I awardees, prior to receipt of final payment, and Phase II awardees, prior to receipt of more than half the total contract award amount AND before receipt of final payment. All questions must be answered and an authorized officer of the company must sign and date it prior to submission. This need not be part of the Phase II proposal, but be aware completion is part of the requirements throughout the Phase II as described above. The certification can be found at <https://www.afsbirsttr.af.mil/Portals/60/Pages/Phase%20I-II/SBIR-STTR-Phase-I-II-Life%20Cycle%20Certifications.pdf>.

5.6 Allocation of Rights: If partnering with a research institution or another organization,

the firm may wish to complete an allocation of rights agreement. For an STTR award, the small business concern and research institution must, prior to award, sign an intellectual property agreement identifying the sharing of rights to data. This is not required under SBIR topics. However, if completed, please find an example of an allocation of rights agreement at

<https://www.afsbirsttr.af.mil/Portals/60/Pages/Phase%20II/Model%20agreement%20for%20the%20allocation%20of%20rights.pdf>

5.7 Other: Combine all documents in this section into a single PDF and upload them into the ‘Other’ section of Volume 5: Supporting Information.

5.7.1 SBIR/STTR Environment, Safety and Occupational Health (ESOH)

Questionnaire: Include a completed version of Attachment 1, SBIR/STTR Environment, Safety and Occupational Health (ESOH) Questionnaire in the ‘Other’ section of Volume 5: Supporting documents.

5.7.2 Prior, Current, or Pending Support of Similar Proposals or Awards:

If a proposal for essentially equivalent work been submitted to other US Government agencies or DoD components as described in 1.4 above, provide the following in the Volume 5, Supporting Documents, slide deck:

- i. The name and address of the Federal agency (ies) or DoD Component(s) to which proposals were or will be submitted, or from which an awarded is expected or has been received;
- ii. The date of proposal submission or date of award;
- iii. The title of the proposal;
- iv. Name and title of the Principal Investigator for each proposal submitted or award received; and
- v. Title, number, and date of announcement(s) under which the proposal was or will be submitted, or under which an award is expected or has been received.
- vi. If award was received, provide the contract number.
- vii. Specify the applicable topics for each SBIR proposal submitted or award received.

NOTE: If this does NOT apply, include a single-page document that states, on its own page, “No prior, current, or pending US Government support for proposed work.”

5.7.3 Facilities/Equipment: Describe instrumentation and/or physical and digital facilities necessary and available to carry out the Phase II effort. Justify equipment to be purchased and include in ‘Additional Cost Information’, as necessary. State whether proposed performance locations meet environmental laws and regulations of Federal, state, and local Governments for, but not limited

to, airborne emissions, waterborne effluents, external radiation levels, outdoor

noise, solid and bulk waste disposal practices, and handling and storage of toxic and hazardous materials.

5.7.4 Consultants/Subcontractors: List private companies, consultants, universities or federal labs potentially formally involved in the project. All should be described in detail and included in the cost proposal as necessary. In accordance with the Small Business Administration (SBA) SBIR Policy Directive, a minimum of 50% of the R/R&D must be performed by the proposing firm, unless otherwise approved in writing by the Contracting Officer. Signed copies of all consultant or subcontractor letters of intent must be attached to the proposal. These letters should briefly state the contribution or expertise being provided. Include a SOW and detailed cost proposal of the work to be performed by the sub-contractors. Include information regarding consultant or subcontractor unique qualifications. Identify any subcontract/consultant foreign citizens.

5.7.5 15-Page Slide Deck: Include a 15-page slide deck concisely summarizing the main points of the Phase II proposal. This slide deck should be clear and easy to understand, the intent being for use as a starting point to understanding the proposal. Other volumes will provide the bulk of information.

- Slide 1 = Summary -> Include an easy-to-understand overview of the product-market fit, proposed trial, proposed customer, and objectives and key metrics.
- Slide 2 = Technical Merit Summary -> Summarize the best points about the commercial non-defense solution and how it will be adapted to meet AF needs.
- Slide 3 = Team's ability to accomplish work summary-> Summarize the best points about the team to meet the AF end-user's and the associated required stakeholders' needs to complete the trial.
- Slide 4 = Commercialization potential -> Summarize the best points about the potential AF customer's, which will likely be different than the end-user's, plans for Phase IIIs or non-defense commercialization.
- Slide 5 = Financial sustainability -> How are your product and company both financially sustainable? Include sales/revenue numbers of the specific non-defense commercial solution. (Note: This information will NOT be shared outside the acquisition team.)
- Slide 6 = Team Commercialization Overview -> Include partners and investors and past efforts and successes from the team. This slide should include commercialization strengths of the team, not just scientific strengths.
- Slide 7 = Pricing -> The pricing of the effort should be linked to the price of the non-defense commercial solution. Include references to invoices for the non-defense commercial solution.
- Slide 8 = Non-defense commercial solution -> Clearly describe the non-defense commercial solution, including relevant customers/sales.
- Slide 9 = Adaptations of commercial solution -> Describe changes to the non-defense commercial solution needed to meet the needs of the AF end-user/ customer.
- Slide 10 = AF End-User -> Describe in detail the AF end-user and how the solution addresses their needs. Also note any MOUs received.

- Slide 11 = Key stakeholders -> Describe stakeholders, e.g., safety, range officials, cybersecurity, and information assurance, within and outside the Government key to executing the product's trial with the AF Customer and how their buy-in will be secured. This could be as simple as a signature on an official document.
- Slide 12 = Objectives and key metrics -> Describe how success/failure will be measured during the solution's trial.
- Slide 13 = Milestone Schedule -> Include highlights of the milestone schedule with timing, acceptance criteria, and proposed costs.
- Slide 14 = Results of Phase I -> Include Phase I highlights of metrics and methods for AF end-user and customer discovery.
- The remaining slide is for any additional points the firm wishes to include.

5.7.6 1-Page 'Sales Pitch' Summary Document: Include a visually appealing, 1-page summary 'sales pitch' for the company and proposed adaptation of the non-defense commercial solution as intended to meet a US Government need. This portion of the document may be circulated publicly and should contain no confidential or classified information nor Personally Identifiable Information, e.g., names, contact information, etc., for US Government employees.

5.7.7 100 Second Video: Include in the 'other' documents on its own, single page, a working link to a public-facing video describing the company and proposed adaptation of the non-defense commercial solution intended to meet a US Government need. This portion of the document may be circulated publicly and should contain no confidential or classified information nor Personally Identifiable Information, e.g., names, contact information, etc., for US Government employees.

It should include the product and value proposition to the DoD, e.g., similar to a Kickstarter or Amazon.com product video. If the link is broken or video is longer than 100 seconds, it will not be viewed; any information contained therein will not be used in the effort's evaluation.

5.7.8 [Only If Applying to RAPID] RAPID Phase II Documentation: If applying for a RAPID Phase II, include in the 'Other' section a RAPID Application Package. A RAPID Application Package consists of:

1. A completed RAPID application form. The company and investor must:
 - a. State the outside investor will match the entirety of the Phase II SBIR funding, in cash, contingent on the company's selection for Phase II award. The matching rates needed to qualify for RAPID are as follows:
 - For all companies, the minimum matching rate is \$1.00 private funding for every SBIR dollar, e.g., Phase II SBIR funding of \$1,500,000 must be matched with \$1,500,000 from the private investor(s).
 - For companies with no prior Phase II SBIR awards from DoD or other Federal agency, the minimum matching rate is \$.25 from a Government investor for every

SBIR dollar, e.g., \$1,500,000 Phase II SBIR funding must be matched \$375,000 Government investment.

- For companies with one or more prior Phase II SBIR awards from DoD or other Federal agency, the minimum matching rate is \$1.00 Government investment for every SBIR dollar, e.g. Phase II SBIR funding totaling \$1,500,000 must be matched with \$1,500,000 Government investment.
- b. Certify outside funding included in the application qualifies as "RAPID investment", and the investor qualifies as an "outside investor," as defined in **DoD Fast Track Guidance** at https://www.acq.osd.mil/osbp/sbir/docs/DoD_Fast_Track_Guidance.pdf.
- 2. A letter from the outside investor to the company, submitted electronically on the DoD Submission Website in Volume 6, Other (see section 5.7 of this document). The letter should contain:
 - a. A commitment to match the entirety of the Phase II SBIR funding, in cash, contingent on the company's selection for Phase II award.
 - b. A brief statement (less than one page) describing the portion of the effort the investor will fund. The investor's funds may pay for additional R&D on the company's SBIR project or, alternatively, for other activities not included in the Phase II Work Plan, provided these activities further the development and/or commercialization of the technology, e.g., marketing.
 - c. A brief statement (less than one page) describing (i) the investor's experience in evaluating companies' ability to successfully commercialize technology; and (ii) the investor's assessment of the market for this particular SBIR technology and company's ability to bring this technology to market.

7. VOLUME 6: FRAUD WASTE AND ABUSE CERTIFICATION: The AF SBIR/STTR Program Office has instituted training and certification requirements in an effort to combat fraud in the SBIR/STTR program. As a result, each Small Business is required to complete the Fraud, Waste and Abuse Training as part of their Phase II proposal submission. The SBIR/STTR Program training related to Fraud, Waste and Abuse is available at: <https://training.defensebusiness.org/fwa>. When the training has been completed and certified, the DoD Submission Website will indicate this in the proposal which will complete the Volume 6 requirement. If the training has not been completed, the offeror will receive an error message. The proposal cannot be submitted until this training has been completed. The complete proposal must be submitted via the submission site on or before the date and time specified in the notification.

IV. METHOD OF SELECTION AND EVALUATION CRITERIA

1. Introduction: Phase II proposals are evaluated on a competitive basis by subject matter expert (SME) scientists, engineers, or other technical personnel. Throughout evaluation, selection, and award, confidential proposal and evaluation information will be protected

to the greatest extent possible.

2. Evaluation Criteria:

2.1 Typical Phase II Evaluation Criteria: Typical Phase II proposals will be reviewed for overall merit based on the following criteria published in the DoD SBIR Announcement and as modified in the Air Force Instructions (in descending order of importance):

- (a) Technical Merit – The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.
- (b) Potential for Commercial Application–The potential for commercial (Government or private sector) application and the benefits expected to accrue from this commercialization.
- (c) Qualifications of the Principal Investigator (and Team) – The qualifications of the proposed principal/key investigators, supporting staff, and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.

The proposer's record of commercializing its prior SBIR and STTR projects, as shown in its Company Commercialization Report, will be used as a portion of the Commercialization Plan evaluation. If the "Commercialization Achievement Index (CAI)", shown on the first page of the report, is at the 20th percentile or below, the proposer will receive no more than half of the evaluation points available under evaluation criterion (b) above.

2.2 RAPID Phase II Evaluation Criteria: RAPID Phase II proposals will be reviewed for overall merit based on the following criteria published in the DoD SBIR BAA and as modified in the Air Force Instructions (in descending order of importance):

- (a) Technical Merit – The soundness, technical merit, and innovation of the proposed approach and its incremental progress toward topic or subtopic solution.
- (b) Potential for Commercial Application– The potential, given matching funding secured from outside investor(s), for commercialization, Government or private sector, and the benefits expected to accrue from this commercialization.
- (c) Qualifications of the Principal Investigator (and Team)–The qualifications of the proposed principal/key investigators, supporting staff, and consultants. Qualifications include not only the ability to perform the research and development but also the ability to commercialize the results.

The proposer's record of commercializing its prior SBIR and STTR projects, as shown in its Company Commercialization Report, will be used as a portion of the Commercialization Plan evaluation. If the "Commercialization Achievement Index

(CAI)”, shown on the first page of the report, is at the 20th percentile or below, the proposer will receive no more than half of the evaluation points available under evaluation criterion (b) above.

In order to be eligible for award, the project must have substantially met its Phase I technical goals, and be in good standing regarding budgetary and other programmatic factors. Selection and award of a RAPID proposal is not mandated and DoD retains the discretion not to select or fund any RAPID proposal.

AF will notify each RAPID company whether it has been selected for phase II award. Once notified, the company and investor must certify within 45 days the entire amount of matching funds from the outside investor has been transferred to the company.

2.3 Other Factors Considered During the Selection Process:

These additional factors apply to both the Typical Phase II and RAPID Phase II proposals.

Cost reasonableness and realism shall also be considered to the extent appropriate. Other factors considered during the selection process are results of the Phase I effort; commitment for Phase III funding; possible duplication with other R/R&D; program balance; budget limitations; and potential, if successful, of leading to a product of continuing interest to DoD. Where technical evaluations are essentially equal in merit, and as cost and/or price is a substantial factor, cost to the Government will be considered in determining the successful offeror. AF anticipates pricing will be based on adequate price competition.

Technical reviewers will base their conclusions only on information contained in the proposal, except when specified, e.g., the ‘100-second video’. It cannot be assumed reviewers are acquainted with the firm, key individuals, or referenced experiments. Relevant supporting data such as journal articles, literature, Government publications, etc., should be contained or referenced in the proposal and will count toward the page limit.

Ensure these points are addressed before submitting the proposal:

- The solution should be an adaptation of an existing non-defense commercial solution
- Clearly demonstrate the existing non-defense commercial solution exists, i.e., is in the hands of non-defense commercial customers.
- Detail the specific changes required to the non-defense commercial solution to meet the needs of the Air Force end-user/customer and why.
- Identify a motivated and empowered Air Force end-user ready, willing and capable to participate in the Phase II trial.
- Identify an Air Force customer who, if Phase II is successful, is capable of transitioning the solution to a Phase III agreement.

- Demonstrate a deep understanding of a specific Air Force end-user, including their role and how the solution addresses their needs.
- Secure buy-in from stakeholders necessary for Phase II trial completion, e.g., regulatory functions such as Legal.
- Demonstrate the company's and the specific solution's financial sustainability through outside revenue sources, e.g., non-defense commercial customer sales, outside private investment by eligible partners, etc.

The firm is encouraged to pursue private sector or non-SBIR Government funding for a follow-on Phase III effort. Phase III efforts can cover a broad range of activities from commercial application of SBIR-funded R/R&D by non-Federal sources of capital; SBIR-derived products/services intended for use by the Federal Government, funded by non-SBIR Federal funding; or continuation of R/R&D, previously competitively selected using peer review or merit-based selection procedures, funded by non-SBIR Federal funds.

NOTE: Restrictive notices notwithstanding, proposals may be handled for administrative purposes only, by support contractors including ByteCubed, Oasis Systems, Riverside Research, Peerless Technologies, The DCode Group Inc., and/or Stealth Entry LLC. AF Special Topic 18.3, 19.1, 19.2 and 19.3-005 proposals will be reviewed but not evaluated by The DCode Group as part of a commercial viability readiness review. In addition, only Government employees and technical personnel from Federally Funded Research and Development Centers (FFRDCs) MITRE and Aerospace Corporations working under contract to provide technical support to AF Life Cycle Management Center and Space and Missiles Centers may evaluate proposals. All support contractors are bound by appropriate non-disclosure agreements. For concerns about either of these contractors, contact the AF SBIR/STTR Contracting Officer, Michele Tritt, michele.tritt@us.af.mil.

V. CERTIFICATIONS: In addition to the standard Federal and DoD procurement certifications, the SBA SBIR/STTR Policy Directives require collection of certain information from firms at the time of award and during the award life cycle. Each firm must provide this additional information at the time of the Phase II award, prior to receiving 50% of the total Phase II award amount, and prior to final payment. This certification is available in the “Compliance with Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) Program Rules” training on slide 42. This can be accessed at <https://www.wpafb.af.mil/Portals/60/documents/afri/sbir/SBIR-Program-Training-for-SBs-160627.pdf?ver=2017-06-27-083138-260>.

VI. DEBRIEFINGS: In accordance with FAR 15.505, a debriefing may be requested in writing. Consistent with the DoD SBIR/STTR BAAs, the request must be received within 30 days after receipt of notification of non-selection. Written requests for debrief must be sent directly to the Contracting Officer named in the non-selection notification. Requests should include the company name and telephone number/email address for a company point of contact, as well as an alternate. Also include the topic number under which the proposal was submitted and the proposal number. Requests received more than 30 days after receipt of notification of non-selection will be fulfilled at Contracting Officers' discretion. Unsuccessful offerors are entitled

to no more than one debriefing per proposal. NOTE: FAR15.505(a)(2) states, at the offeror's request, debriefs may be delayed until after award. Under the AF SBIR/STTR Programs, debriefs are automated and standardized. Therefore, pre- and post-award debriefs are identical.

VII. REFERENCES

Definitions

1. Small Business Concern (SBC), DoD 18.3 SBIR BAA - Section 3.15:
<https://www.acq.osd.mil/osbp/sbir/solicitations/sbir20183/index.shtml>

A concern that meets the requirements set forth in 13 C.F.R. § 121.702 (available [here](#)).
An SBC must satisfy the following conditions on the date of award:

- a. Is organized for profit, with a place of business located in the United States, which operates primarily within the United States or which makes a significant contribution to the United States economy through payment of taxes or use of American products, materials or labor;
- b. Is in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that if the concern is a joint venture, each entity to the venture must meet the requirements set forth in paragraph (c) below;
- c. Is more than 50% directly owned and controlled by one or more individuals (who are citizens or permanent resident aliens of the United States), other small business concerns (each of which is more than 50% directly owned and controlled by individuals who are citizens or permanent resident aliens of the United States), or any combination of these; and
- d. Has, including its affiliates, not more than 500 employees. (For explanation of affiliate, see www.sba.gov/size.)

2. Proprietary Information, DoD 18.3 SBIR BAA - Section 3.9:
<https://www.acq.osd.mil/osbp/sbir/solicitations/sbir20183/index.shtml>

Proprietary information is information provided which constitutes a trade secret, proprietary commercial or financial information, confidential personal information or data affecting the national security.

Offeror Eligibility and Performance Requirements

DoD 18.3 SBIR BAA - Section 4.2:
<https://www.acq.osd.mil/osbp/sbir/solicitations/sbir20183/index.shtml>

Offeror Eligibility and Performance Requirements

- a. Each proposer must qualify as a small business concern as defined by 13 C.F.R §§ 701-705 at time of award and certify to this in the Cover Sheet section of the proposal. The eligibility requirements for the SBIR/STTR programs are unique and do not correspond

to those of other small business programs (see Section 3.15 of this BAA). Proposers must meet eligibility requirements for Small Business Ownership and Control (see 13 CFR § 121.702 and Section 4.4 of this BAA).

- b. A minimum of two-thirds of the research and/or analytical work in Phase I must be conducted by the proposing firm. For Phase II, a minimum of one-half (50%) of the research and/or analytical work must be performed by the proposing firm. The percentage of work is measured by both direct and indirect costs.
- c. For both Phase I and II, the primary employment of the principal investigator must be with the small business firm at the time of the award and during the conduct of the proposed effort. Primary employment means that more than one-half of the principal investigator's time is spent with the small business. Primary employment with a small business concern precludes full-time employment at another organization.
- d. For both Phase I and Phase II, all research or research and development work must be performed by the small business concern and its subcontractors in the United States.
- e. Benchmarks. Proposers with prior SBIR/STTR awards must meet two benchmark requirements for Progress Towards Commercialization as determined by the Small Business Administration (SBA) on June 1 each year.
 - (1) For all proposers with greater than 20 Phase I awards over the past five fiscal years excluding the most recent year (currently FY 2013-2017), the ratio of Phase II awards to Phase I awards must be at least 0.25.
 - (2) For all proposers with greater than 15 Phase II awards over the last ten fiscal years excluding the last two years (currently FY 2007-2016), the proposer must have received, to date, an average of at least \$100,000 of sales and/or investments per Phase II award received or have received a number of patents resulting from the SBIR work equal to or greater than 15% of the number of Phase II awards received during the period.

Consequence of failure to meet the benchmarks:

- SBA will identify and notify Agencies on June 1st of each year the list of companies which fail to meet minimum performance requirements. These companies will not be eligible to submit a proposal for a Phase I award for a period of one year from that date.
- Because this requirement only affects a company's eligibility for new Phase I awards, a company that fails to meet minimum performance requirements may continue working on its current ongoing SBIR/STTR awards and may apply for and receive new Phase II and Phase III awards.
- To provide companies with advance warning, SBA notifies companies on April 1st if they are failing the benchmarks. If a company believes that the information used was not complete or accurate, it may provide feedback through the SBA Company Registry at www.sbir.gov.
- In addition, SBA has posted a [Guide to SBIR/STTR Program Eligibility](#) to help small businesses understand program eligibility requirements, determine if they will be eligible at the time of award, and accurately complete necessary certifications.
- The benchmark information on the companies will not be available to the public.

Marking Proprietary Proposal Information

DoD 18.3 SBIR BAA - Section 5.3:

<https://www.acq.osd.mil/osbp/sbir/solicitations/sbir20183/index.shtml>

Marking Proprietary Proposal Information

Offerors that include in their proposals data that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, shall:

(1) Mark the first page of each Volume of the proposal submission with the following legend:

"This proposal includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed-in whole or in part-for any purpose other than to evaluate this proposal. If, however, a contract is awarded to this offeror as a result of-or in connection with-the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in pages [insert numbers or other identification of sheets]"; and

(2) Mark each sheet of data it wishes to restrict with the following legend:

"Use or disclosure of data contained on this page is subject to the restriction on the first page of this volume."

The DoD assumes no liability for disclosure or use of unmarked data and may use or disclose such data for any purpose. Restrictive notices notwithstanding, proposals and final reports submitted through the DoD Submission Web site may be handled, for administrative purposes only, by support contractors. All support contractors are bound by appropriate non-disclosure agreements.